

Table of Contents

5.9	Socioeconomics.....	5.9-1
5.9.1	Affected Environment.....	5.9-1
5.9.2	Environmental Consequences	5.9-7
5.9.3	Cumulative Impacts.....	5.9-11
5.9.4	Mitigation Measures.....	5.9-11
5.9.5	Applicable Laws, Ordinances, Regulations, and Standards	5.9-11
5.9.6	References	5.9-12

Tables

Table 5.9-1	Population of the Study Area
Table 5.9-2	Employment by Industry Group Imperial County
Table 5.9-3	Employment Growth by Occupation Imperial County
Table 5.9-4	Employment Data in the Study Area (Annual Average)
Table 5.9-5	Housing in Communities Potentially Affected by the Project (1998)
Table 5.9-6a	Imperial County General Fund Revenues for 2000-2001
Table 5.9-6b	Imperial County General Fund Expenditures for 2000-2001
Table 5.9-7	Ethnic and Racial Composition (1998) (Percent Total Population) ²
Table 5.9-8	Poverty Status and Income of Study Area
Table 5.9-9	Family Income within Six Miles of the Proposed Project Site
Table 5.9-10	Project Labor Needs and Available Labor by Craft/Skill
Table 5.9-11	Estimated Operations and Maintenance Staff
Table 5.9-12	Summary of Laws, Ordinances, Regulations, and Standards
Table 5.9-13	Agency Contact List for Laws, Ordinances, Regulations, and Standards

Figures

Figure 5.9-1A	Distribution of Minority Populations, Low-Income Populations and Significant Pollution Sources (Map 1 of 3)
Figure 5.9-1B	Distribution of Minority Populations, Low-Income Populations and Significant Pollution Sources (Map 2 of 3)
Figure 5.9-1C	Distribution of Minority Populations, Low-Income Populations and Significant Pollution Sources (Map 3 of 3)

5.9 SOCIOECONOMICS

This section describes the socioeconomic setting of the area potentially affected by the Salton Sea Unit 6 (SSU6) Project, and includes a discussion of the potential socioeconomic impacts caused by the construction and operation of the proposed project. Also included in this section are Laws, Ordinances, Regulations, and Standards (LORS) and agency contacts applicable to socioeconomics, proposed mitigation measures, and a discussion of permits required for the project. Tables and figures are found at the end of this section.

5.9.1 Affected Environment

5.9.1.1 Study Area

The proposed SSU6 Project is located south of the Salton Sea. This region of the Imperial Valley is used mostly for agriculture and geothermal power production. Nine geothermal power plants are currently within 2 miles of the project area. This section discusses the affected socioeconomic resources for the SSU6 Plant consisting of the following components: the Geothermal Plant Facility, Parking, and Construction Staging and Lay-down Areas; Production Well Pads; Injection Well Pads; Production Pipelines; Injection Pipelines; Transmission Lines; and Water Supply Line.

The proposed project is in an unincorporated area of Imperial County. Imperial County encompasses approximately 4,600 square miles in the southeastern most portion of California. It was originally part of San Diego County, but became its own county in 1907. Imperial County has a strong agricultural economy and is ranked among the top 10 agricultural counties in California (County website, 2002)

This section describes the location and economic and demographic characteristics of the study area, including population, employment and economy, local government finance, housing, public services and utilities, and schools. The study area for the evaluation of socioeconomic impacts encompasses census tract 101 of Imperial County. It also includes all large communities within easy commuting distance of the power plant site as well as other ancillary facilities (for this project easy commuting distance is generally defined to include distances that involve up to a one-hour, one-way commute for construction workers and operations employees). The study area therefore includes the communities of Calipatria, Niland, Westmorland, Brawley, and El Centro (see Figure 5.9-1A). It can be assumed that workers will travel from each of these areas to work on the project. Calipatria is the closest city to the project site at just over 6 miles away.

The principal urbanized area in the study area is the city of El Centro, about 30 miles south of the SSU6 plant site. Other cities and major communities within the one-hour commuting distances of the project include Calipatria, about 6 miles southeast; Brawley, about 17 miles southeast; Westmorland, about 15 miles south; and Niland, about 7 miles northeast. The discussion below focuses on the major cities and communities identified above that will most likely be affected by the SSU6 Project.

The proposed project consists of the construction and operation of a geothermal power plant in central Imperial County. This section discusses construction and operational impacts of the proposed SSU6 Project, including transmission lines, well pads, pipelines, and water supply line as illustrated in Figure 3.1-2. Given the geographical proximity of all the components, existing socioeconomic conditions and potential impacts are discussed below for the project as a whole and are not separated out by project component.

The SSU6 Project would be located in an area surrounded by nine other power plants. The nearest residence is the home of a Refuge employee, which is approximately 0.75 miles from the plant site (in the Refuge). The next closest residences are approximately 4 miles from the plant site.

The U.S. Census was used to compile data in the study area. The 2000 census was used for demographic and housing data. The 1990 census was used for income information because the information is not yet available from the 2000 census. Information presented below is specific to Imperial County, one of the communities above, or census tract 101. Census tract 101 is 197,206 acres and includes the project site and communities of Calipatria and Niland.

5.9.1.2 Population

The SSU6 Project site is in unincorporated Imperial County, in an area characterized by low population density. In 2000, the total population of the 150,400-acre census tract in which the project is located was 9,586 persons with an average density of about 40 persons per square mile (U.S. Census Bureau 2000). There are no residential communities within 6 miles of the plant site, and there are no known health studies for this area.

As of the 2000 census, Imperial County had a population of approximately 142,361 persons. Imperial County is the fifth-fastest growing county in California (Employment Development Department [EDD] County Snapshot 2001). The County's population has grown from about 109,303 persons in 1990, an increase of approximately 23.3 percent in 10 years. About 35 percent of the total County population is under 20 years of age; about 55 percent are between the ages of 20 and 64, and about 10 percent are senior citizens.

Table 5.9-1 presents the population of the affected communities. El Centro is the largest city in the study area, and has a population of 37,853 persons, which is about 27 percent of the total population in the County. Brawley is the second largest community in the study area and has a population of 22,052 persons. In addition to these larger incorporated cities, there are other smaller incorporated and unincorporated communities in the study area including Calipatria, Westmorland, and Niland.

It should be noted that the project site is actually in an unincorporated area of census tract 101. This census tract includes the communities of Calipatria and Niland, and if these populations are subtracted, the remaining population of census tract 101 is 1,154.

5.9.1.3 Employment and Economy

The employment and economy of the Imperial County region has historically been tied to agriculture. Of the county's approximately three million acres, approximately 18 percent of the land area is in agricultural use (California Department of Finance, 2001). Although agriculture has long been the leading industry in the county, the labor force and industry are now becoming more diversified, with increased opportunities in retail, manufacturing, and technology services (EDD County Snapshot, 2001). Employment by industry group is provided in Table 5.9-2. The largest employer in the county is the Government, which employs approximately 15,500 people (see Table 5.9-2). Additional industries in the area include construction and mining, transportation and public utilities, services, and finance, insurance, and real estate. Agriculture, government, and retail trade are the leading industry groups in terms of employment.

In the future, job growth for Imperial County is expected to be highest in retail sales. There is also anticipated to be job growth for such professions as teacher aides, police officers, and truck drivers. See Table 5.9-3 for additional occupations with job growth in Imperial County.

5.9.1.3.1 Existing Unemployment Rates

As of 2000, the county had a labor force of approximately 55,100 workers, of which 43,00 were employed. The unemployment rate was 21.9 percent (EDD Labor Market Info Division, 2001). The labor force of the County and study area communities is presented in Table 5.9-4.

5.9.1.3.2 Projected Unemployment Rates

The unemployment rate projected for 2004 is 37.7 percent and will continue to increase because of population growth, increase in nonfarm employment, and a decrease in farm employment (San Diego State University, 2002).

5.9.1.4 Housing

5.9.1.4.1 Temporary Housing

In addition to permanent housing, there is ample transient housing in the County and study area. Based on data from the American Automobile Association (California) directory (which includes only those hotels and motels that are members of the association) and other resources, there are about 960 hotel/motel rooms and suites in the study area communities. Additional housing opportunities are available in the form of camping and mobile home sites. Information for Hotel/Motel occupancy rates was not available for the study area.

5.9.1.4.2 Permanent Housing

Table 5.9-5 presents the housing resources in the study area communities. As of 2000, there were about 43,891 housing units in unincorporated Imperial County and an additional 20,929 units in the other incorporated communities in the study area. The vacancy rate for housing varied from approximately 6 percent in Calipatria to approximately 7 percent in Westmorland. The commonly accepted vacancy rate below which housing is considered in short supply is 5 percent. According to Table 5.9-5, the vacancy rate of permanent and rental housing in the study area ranges from 5.9 to 7.1 percent, therefore housing in the project study area is not considered to be in short supply.

5.9.1.5 Utilities

5.9.1.5.1 Water

The project site is within the IID service area, which provides irrigation water and electric power. IID is the sixth largest power district in California and one of the largest irrigation districts in the world, and receives its water from the Colorado River via the All-American Canal (Imperial Irrigation District [IID], 2002). The IID diverts and delivers approximately 3.1 million afy of Colorado River water to nine cities and nearly 500,000 acres of agricultural lands in Imperial

County. Approximately 98 percent of IID water is used for agricultural purposes. The remaining 2 percent is delivered to nine Imperial County cities, where the water is treated to safe drinking water standards, and distributed to residential water customers (IID 2002). A water service agreement has been arranged with IID to supply water to the SSU6 plant site.

5.9.1.5.2 Electric

IID also provides electric power in this area to over 6,000 square miles. IID ranks as the sixth largest power utility in California based on power consumption. IID owns generation facilities and purchases power from the Western Power Administration (Parker-Davis) and from the El Paso Electric Company to serve electricity to over 92,000 customers in Imperial County, along with portions of Riverside and San Diego counties. In 1998 the peak demand was 684.3 MW (IID, 2002).

5.9.1.5.3 Natural Gas

The gas company (Southern California Gas) supplies natural gas to the project area. However, gas is not required for the project.

5.9.1.5.4 Waste

The waste disposal facilities in the project area are described in Section 5.13.2.2 and Table 5.13-2.

5.9.1.5.5 Planned Expansion of Utilities

There are currently no plans to expand any utilities.

5.9.1.6 Public Services

5.9.1.6.1 Fire Protection

The Calipatria Fire Department is under contract with Imperial County Fire Department to provide fire protection to areas outside the city of Calipatria, including the proposed project area. Under the contract, the county fire department provides funding and a fire truck to the Calipatria Fire Department for fire protection in areas of unincorporated Imperial County (Hall, 2001). The Calipatria Fire Department is in Calipatria, serves approximately 250 square miles, and protects an estimated 3,000 people.

The Calipatria Fire Department is approximately 11 miles from the project site and has 3 paid professional and 13 volunteer firefighters, including 1 chief, 2 captain-firefighter/emergency medical technicians (EMT), 8 firefighter/first responder, and 6 firefighter/EMTs. Services include fire, emergency medical services (EMS), extraction, haz-mat, and search and rescue (California Institute for Rural Health Management [CIRHM], 2002). Average response time is approximately 5 minutes; however, response times are generally faster during daylight hours and longer during nighttime hours because the station is not manned at night. Station equipment includes three engines, water tender, rescue squad, and a chief's vehicle. There are currently no plans for additional stations near the project area (Hall, 2001).

5.9.1.6.2 Law Enforcement

The County Sheriff's Department provides police protection services in unincorporated Imperial County, including the project area. The Department has approximately 75 full-time peace officers (California Commission POST, 2000). The nearest substation is in Niland but is not manned 24 hours a day. The nearest station that is manned 24 hours a day is the main Sheriff's Department in El Centro, which is approximately 40 miles from the project site. The average response time to the project area is approximately 10 minutes. There are currently no plans for additional stations near the project area (Sheriff's Department, 2002).

5.9.1.6.3 Emergency Response

Standard procedure is that Calipatria Fire Department EMT are the first dispatched to the scene (Hall, 2002). Personnel and response times are detailed above under "Fire Protection." The next to be dispatched is Gold Cross Ambulance. They are the only private company that can provide emergency transport in Imperial County and have approximately 50 personnel. The ambulances are dispatched from El Centro and Brawley, and have a response time of less than 10 minutes in these urban areas, or 1 hour for rural areas (Gold Cross Ambulance Dispatcher, 2002). There are currently no plans for additional stations near the project area.

5.9.1.6.4 Medical Facilities

Imperial County has two hospitals, Pioneers Memorial Hospital (Pioneers) in Brawley, and El Centro Regional Medical Center, in El Centro (CIRHM, 2001). Pioneers is the closest hospital at approximately 22 miles from the project site. Pioneers has approximately 100 beds and 105 doctors/physicians. There is currently no plan to expand the facility (Pioneers Memorial Hospital Administration, 2002).

5.9.1.6.5 School Districts

Imperial County consists of 16 school districts, with a total of 31 elementary schools, 7 middle schools, 2 junior high schools, 9 high schools, and 7 continuation schools (California Department of Education website, 2001). The project site is in the Calipatria Unified School District. Calipatria Unified has one elementary school for grades kindergarten through 8, and one with grades kindergarten through 4. There is one middle school for grades 5 through 8, one high school for grades 9 through 12, and one continuation high school for grades 9 through 12 (Raceles, 2002). School expansion information was available for the Calipatria Unified School District, which forecasts an expansion to accommodate 100 additional students from the existing enrollment of approximately 1,300 students. This expansion consists of construction of several new structures (currently in architectural planning review) and is expected to take place within the next two to three years (Calipatria Unified School District, 2002).

5.9.1.7 Local Government Finance

The local agencies with taxing powers over the project area are Imperial County and the Calipatria Unified School District. The total assessed value of all secured property in Imperial County in 2001-

2002 was approximately \$5.85 billion (Chew-Longoria, 2002), and the total property tax revenues collected in the same year were roughly \$77.17 million (Chew-Longoria, 2002). All secured property in California is taxed at the rate of 1 percent of the total assessed value. Property taxes are collected by the county in which the property is located. Each year the total property tax revenues increase by an estimated 2 percent assessed (Chew-Longoria, 2002).

Total taxable sales in the county in 1999 were approximately \$1.3 billion, up from about \$1.1 billion in 1998. Taxable retail sales in 1998 were approximately \$7.6 million, and were an estimated \$8.7 million in 1999 (California Department of Finance, 2001).

General Fund revenues for 2000-2001 totaled \$125,944,312, a 12 percent (\$13.6 million) increase over the prior year. General Fund expenditures for 2000-2001 totaled \$119,889,769, an 11.6 percent (\$12.4 million) increase over the prior year (Imperial County Auditor-Controller's Office, 2001). Tables 5.9-6a presents a summary of Imperial County General Fund revenues for the year 2000-2001, and Table 5.9-6b summarizes General Fund expenditures for 2000-2001.

5.9.1.8 Environmental Justice

Table 5.9-7 presents the racial and ethnic composition of the study area communities. Hispanic/Latino is the largest ethnicity in the County. El Centro, Brawley, and Westmorland are generally similar to the County in its racial/ethnic composition. Calipatria has significantly higher concentrations of Black population, 21 percent and Hispanics make up 57 percent of the populations of this community. The community of Niland is generally split equal between the Hispanic and white populations.

As previously mentioned, 2000 census data for median household income is not yet available. Therefore, 1990 census information was used. In 1990, the median household income in the County was \$22,442. The median household income for El Centro is greater than the county at \$25,174. Brawley is roughly the same as the County average. The median household incomes for Calipatria and Westmorland are slightly lower than the county average, and Niland's median household income was the lowest at \$16,207. Table 5.9-8 reports per capita income data for the study area.

As required by the CEC 6-month process, Figures 5.9-1A through 5.9-1C show the distribution of minority populations and significant pollution sources within 6 miles of the proposed project site. The proposed project site is in census tract 101, block group 6, and there are approximately 17 census blocks in the 6-mile radius. The significant pollution sources within 6 miles of the proposed project site are nine other geothermal facilities as shown on Figure 5.12-1 of the Visual Resources Section. The total population within the 6-mile radius is 104, of which a total of 89 are classified as black or African American, Asian, Hispanic or Latino, or some other race (not including white).

The census only provides income information at the block group level, not the block level. Table 5.9-9 provides the relevant income information. The proposed project site is mostly located in one block group (block group 6), and the specific location of income groups is unavailable.

5.9.2 Environmental Consequences

The following sections discuss the effects of project construction and operation on the socioeconomic resources of the project area. Potential cumulative impacts are also discussed. As outlined in Appendix G of the CEQA Guidelines, project-related socioeconomic impacts would be significant if they induced substantial growth or concentration of population, displaced a large number of people, or disrupted/divided the physical arrangement of an established community. The following discussion includes impact analysis for the SSU6 Project.

5.9.2.1 Plant Construction and Operation**5.9.2.1.1 Worker Availability/Commute*****Construction***

The SSU6 Project will be built under a Project Labor Agreement that becomes effective upon certification by the CEC. Power plant construction, including pipelines, wells, and transmission lines, is expected to take approximately 26 months and to start in the sixth month after the notice to proceed to the construction contractor. Construction workers would work a single-shift, 10-hour/day, 5-day/week workweek. The number of construction and professional workers associated with the SSU6 Project would increase from 16 in the first month of construction to a peak of 467 in the 19th month from the notice to proceed to the construction contractor, and then decline to 7 workers during the final month of construction.

In most skill categories, the maximum number of workers needed is small. The highest numbers are for maintenance repairers/general utility (62), carpenters/millwrights (89), concrete crews (35), piping crews (147), welders/cutters (65), and laborers (69). Information on the number of workers with skills in these categories even if all of the identified workers were available, is provided on Table 5.9-10. As can be seen, there would not be an adequate number of workers in several skill categories to meet the requirements of the project. Therefore, some workers would need to commute or relocate to work on the project. Table 3.4-1 shows the number of workers to be employed monthly by craft during construction.

The average number of workers present at the site during the construction period would be 265. Project construction will require about 467 workers during the peak construction month. Based on previous experience, the Applicant estimates that approximately 40 percent or 187 of the peak workers and 106 average workers would be non-local workers. These non-local workers would typically use hotels or other temporary housing in the cities of Niland, Calipatria, Brawley, and El Centro. The construction workers would reside in the hotels/temporary housing during the workweek and return to their homes on weekends.

The non-local construction workforce would likely be distributed in the cities and towns in the County as follows:

- 50 percent from El Centro and Brawley and other areas south of the site
- 25 percent from Calipatria and other areas east of the site
- 25 percent from Niland and other areas north of the site

These estimates assume that these non-local construction workers will likely reside in the larger communities in the study area where highway access, hotels/motels, and amenities are available, and where commute trips are of reasonable length.

At peak construction time, it is estimated that about 93 of these workers will locate in El Centro and areas south of the site, about 47 workers will locate in Calipatria and areas east of the site, and 47 workers will locate in Niland and areas north of the site. Construction payroll is estimated to be \$30 million.

Construction of the SSU6 Project would provide employment opportunities for surplus workers in numerous craft groups in Imperial County (see Table 5.9-10), resulting in a socioeconomic benefit. Additionally, adequate temporary housing is available for transient worker and no significant impacts are anticipated related to the temporary concentration of workers in these communities.

Operations

Following completion of construction, approximately 69 permanent employees would staff the power plant (Table 5.9-11). Operations personnel would be divided into four 12-hour rotating shifts. It is estimated that payroll for operational staff would be \$5.9 million annually.

Ninety percent of the full-time staff is estimated to commute from El Centro, Brawley, Calipatria or Niland areas. The remaining 10 percent of the full-time staff may commute from the cities of Indio or La Quinta in Riverside County. Adequate housing is available and these new jobs would provide an economic benefit.

5.9.2.1.2 Locally Purchased Materials

Construction

Local purchasing of equipment and supplies, as well as local spending by construction workers and permanent employee households, would also generate income for local governments in the form of sales tax revenues. The estimated construction payroll is \$30 million, which would be disbursed over the 26 months; a significant portion of this income would likely be spent within the study area, resulting in sales tax revenue. Construction capital expenditures (\$100 million of equipment and materials) would generate about \$7.75 million in tax revenues, some of which would be returned to the County and the study area communities.

Operations

The annual operations payroll is expected to be about \$5.9 million. Typically, about 39 percent of household income is spent on taxable goods; therefore, this operations payroll is estimated to generate about \$99,450 in sales tax revenues annually. Some of these tax revenues would be returned to the County and the community in which the spending occurs. Additionally, equipment and materials worth about \$17 million would be purchased during operations. Some of these purchases would occur in the study area communities and would generate sales tax revenues for the County and the study area communities.

5.9.2.1.3 Capital Cost of the Project of the Potential Impacts on Tax Revenues

The preliminary total investment value is \$460 million. The taxed rate where the project is located is 1.768 (Chew-Longoria, 2002). The Applicant estimates that the annual property taxes from the project would be about \$3 million annually. Under the current assessment method, this would accrue to Imperial County and would be distributed between a large number of funds, including monies to the county schools.

5.9.2.1.4 Utilities

Increases in demand for utilities and public services because of project construction and operation are not expected to be significant because it is anticipated that the project construction would be temporary and is not anticipated to increase demand on utilities. Additionally, the SSU6 project would supply 185 MW of electricity from renewable geothermal energy, reducing the need for fossil fuel consumption for this purpose.

5.9.2.1.5 Water

IID canal water will be used temporarily during construction for dust control and other construction purposes. During operations, a potable water system would be available to supply drinking water and for other domestic uses, including emergency shower and eyewash equipment. The source of service water would be the IID canal. The SSU6 Project would result in a water savings of 572 afy compared to the current water usage of the site for agricultural irrigation (based on irrigation of 173 acres at the rate of 5 afy per acre).

5.9.2.1.6 Waste

The SSU6 Project would not have significant impacts on waste disposal systems as described in Section 5.13.

5.9.2.1.7 Natural Gas

Natural gas will not be used; therefore, no impacts are anticipated.

5.9.2.1.8 Public Services***Fire***

The proposed project would be fully equipped with fire protection and suppression facilities, and operating staff would be trained in fire safety and basic first aid. As discussed in Section 5.9.1.6 the Calipatria Fire Department provides public fire protection in the project area, and would provide backup assistance to onsite fire suppression systems. Potential impacts to fire services are expected to be less than significant.

Law Enforcement

Increases in demand for law enforcement because of project construction and operation are not

expected to be significant because the increase in population would be small and construction-related increase in population would be temporary.

Emergency Response

Increases in demand for emergency response personnel because of project construction and operation are not expected to be significant because the increase in population would be small and construction-related increase in population would be temporary. Additionally, the SSU6 Project would have an emergency response plan and workers would be trained in emergency response procedures.

Medical Facilities

Pioneer Memorial Hospital in Brawley is the closest hospital to the project site. Increases in demand for medical facilities because of project construction and operation are not expected to be significant because it is anticipated that the project operations would have a negligible impact on population.

School Districts

The Calipatria Union School District assesses developer fees at the rate of \$0.34 per square foot of roofed areas for commercial or industrial space (Raceles, 2002). These monies may be used by the school district for both temporary and permanent construction. Roofed structures on the 80-acre plant site consist of the control building (4,800 square feet) and five power distribution centers (4,004 square feet total), resulting in a total of 8,804 square feet of eligible square footage. The 8,804 square feet of development would result in a total economic benefit of \$2,993.36 to the school district (8,804 x \$0.34).

The Project would not place a significant demand on the study area schools, because construction workers are not anticipated to relocate with their families to the area and the 69 permanent operations staff are likely to reside in one of several communities in Imperial County or in Riverside County.

5.9.2.2 Environmental Justice

The CEC 6-Month Data Adequacy process requires a discussion of the potential for disproportionate impacts from the project on minority or low-income people (§ 2022(b)(4)). Additionally, Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations” requires all federal agencies to develop environmental justice strategies. Pursuant to the directive, the USEPA issued guidelines that require all federal and state agencies receiving federal funds to develop strategies to address this issue. This analysis uses the federal guidelines to analyze potential environmental justice impacts. The federal guidelines include a two-step screening process to determine whether a project could result in disproportionate impacts on low-income and minority populations. The first step is to evaluate whether the potentially affected community or area includes minority and low-income populations; if it contains these population groups, the second step is to determine whether the environmental impacts fall disproportionately on minority and low-income members of the community. The CEC uses 50 percent concentration of minorities as a cutoff to indicate that there is a potential issue in a given area.

The proposed SSU6 Project is in census tract 101, which is a portion of Imperial County where the population of Hispanic/Latino people constitutes about 55 percent of the total population. Adjacent cities and communities also have high concentrations (57 to 82 percent) of

Hispanic/Latino and nonwhite populations. In addition to high concentrations of minority populations, the three closest communities have median incomes that are much lower than the average for the County as a whole. Therefore, based on the first step of the screening process described above, the project could potentially affect low-income and minority populations.

In the context of the siting of a power plant, the primary environmental justice issue would be potential air or water emissions that could adversely affect the health of these populations. Other issues could be any potential residential or business displacements, and EMF or noise impacts on populations near the power plant or ancillary facilities. However, the proposed project would not result in significant air quality impacts or impacts to surrounding communities from emissions of toxic air contaminants. The proposed project would also not involve wastewater discharges that could affect drinking water supplies. Because of the project design, mitigation measures, and the absence of sensitive receptors nearby, there would be no significant noise impacts or EMF impacts. The project would not displace any homes or businesses. In light of these findings, the rural and remote character of the area, and the low population concentration near the project, the project would not result in disproportionate impacts on low-income and minority populations present in the area around the power plant and ancillary facilities.

5.9.3 Cumulative Impacts

The proposed project and other reasonably foreseeable projects would provide needed jobs in the area. The proposed project and other foreseeable projects would also provide property tax and sales tax revenue to the local government. The combination of the tax revenues from all of the projects would provide a substantial economic benefit to the local government. No adverse cumulative socioeconomic impacts would occur.

5.9.4 Mitigation Measures

The project would not result in significant adverse socioeconomic impacts; therefore, mitigation measures are not recommended.

5.9.5 Applicable Laws, Ordinances, Regulations, and Standards

5.9.5.1 Federal

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations” required the USEPA to develop environmental justice strategies. As a result of the Executive Order, the USEPA issued guidelines requiring federal agencies and state agencies receiving federal funds to develop strategies to address environmental justice issues (U.S. Environmental Protection Agency [U.S. EPA] Final Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analyses, April 1998). The agencies are required to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations (ENSR, 2000).

5.9.5.2 State

California Government Code Section 65995-65997 (amended by SB 50), states that public agencies may not impose fees, charges, or other financial requirements to offset the cost for school facilities. However, the code does include provisions for levies against development projects near schools. Calipatria Unified School District would receive this fee.

5.9.5.3 Local

The project site is in Imperial County and would be subject to all LORS applicable to the jurisdiction of the Imperial Co. Imperial County General Plan Land Use Element (Imperial County, 1993) Goal 8, Objectives 8.3 and 8.4 ensures that school facilities and all private and public facilities are adequate based on the projected population. The CEC would coordinate compliance with local requirements in the AFC process.

5.9.5.4 Involved Agencies and Agency Contacts

Table 5.9-13 lists Federal, State, and Local Agency contacts for the proposed project.

5.9.5.5 Permits Required

There are no applicable permits required for socioeconomics.

5.9.6 References

AAA Publishing 2000

Brawley Chamber of Commerce. December 2001. Personal Communication.

California Employment Development Department, El Centro Labor Market Consultant. Mason, Cheryl. March 2002. Personal Communication.

California Institute for Rural Health Management (CIRHM), www.cirhm.org/imperial/data.asp

Calipatria Fire Department. Hall, Chris. January 2002. Personal Communication.

Calipatria Unified School District. Raceles, Betty. January 2002, April 2002. Personal Communication.

El Centro Wastewater Treatment Plant. Hines, Randy. January 2002. Personal Communication.

Gold Cross Ambulance Dispatcher. February 2002. Personal Communication.

Imperial County Auditor's Office. Chew-Longoria, Mary Ann. January 2002. Personal Communication.

Imperial County Auditor-Controller's Office. General Purpose Financial Statement for the Year Ended June 30, 2001. <http://www.imperialcounty.net/auditor/financials2001.pdf>

Imperial County Sheriff's Department. Flores, Norma. January 2002. Personal Communication.

Imperial County Sheriff's Station Dispatcher. February 2002. Personal Communication.

Imperial County Sheriff's Station. www.icsso.org

Imperial Irrigation District. www.iid.com.

Pioneers Memorial Hospital Administration. February 2002. Personal Communication.

San Diego State University, 2002. Population and Employment Forecast for Imperial County. http://www.ccbres.sdsu.edu/Data/Indicators_of_the_Month/pdf/Population_Employment_Forecasts.pdf

Southern California Association of Governments. 2001 RTP Growth Forecast. www.scag.ca.gov/data.htm.

State of California Commission on Peace Officer Standards and Training (POST). Employment Data for California Law Enforcement 2000 Imperial County. www.post.ca.gov/employdata/5669.htm.

State of California Controller's Office. Government at a Glance—Counties. www.sco.ca.gov/govglance/9899/hm/cnty139899.htm.

State of California, Department of Finance, Demographic Research Unit. Projects for 2005, 2010, 2015, and 2020. June 2001. www.dof.ca.gov/HTML/DEMOGRAP/P1.doc

State of California, Department of Finance, Economic Research. www.dof.ca.gov/HTML/FS_DATA/profiles/pf_home.htm. February 2001.

State of California, Employment Development Department, Labor Market Information Division (LMID). Labor Force Data for Sub-County Areas. www.calmis.ca.gov/file/lfmonth/impersub.txt, December 2001.

State of California, Employment Development Department, LMID. County Snapshot, Imperial 2001. www.calmis.cahwnet.gov/file/Cosnaps/impersnap.pdf.

State of California, Employment Development Department, LMID. Imperial County-Occupations with Greatest Growth, 1997-2004.

U.S. Census Bureau. www.census.gov, Poverty Thresholds, 2000.

U.S. Census Bureau. www.census.gov, 2000.

U.S. Census Bureau. www.census.gov, 1990.

**Table 5.9-1
POPULATION OF THE STUDY AREA**

County/City	Population 1990 ¹	Population 2000 ¹	Population 2010	Population 2020
Imperial County	109,303	142,361	217,500 ²	294,200 ²
El Centro	31,384	37,853	40,409 ³	42,774 ³
Brawley	18,923	22,052	27,495 ³	32,711 ³
Census Tract 101	NA	9,586	NA	NA
Calipatria	2,690	7,289	8,725 ³	9,638 ³
Westmorland	1,380	2,131	2,584 ³	3,247 ³
Niland	1,183	1,143	NA	NA

1 Source: US Census, 1990 and 2000.

2 Source: CA State Dept of Finance 2001

3 Source: Southern California Association of Governments 2001 RTP Growth Forecast

**Table 5.9-2
EMPLOYMENT BY INDUSTRY GROUP
IMPERIAL COUNTY¹**

Industry Group	Employment	Percent Total Employment
Agriculture	11,300	22.4
Construction and Mining	2,100	4.1
Manufacturing	1,900	3.8
Transportation, Communication and Utilities	1,900	3.8
Wholesale Trade	2,100	4.1
Retail Trade	8,300	16.4
Finance, Insurance and Real Estate	1,100	2.2
Services	5,700	11.3
Government	15,500	30.7
Military ²	500	1.0
Total	50,400	---

1 Source: Imperial County Snapshot, Education Development Department, 2001

2 Source: U.S. Census Bureau, 1990

**Table 5.9-3
EMPLOYMENT GROWTH BY OCCUPATION
IMPERIAL COUNTY**

Occupation	Number of New Jobs 1997-2004
Salespersons, Retail	660
Cashiers	630
Teacher Aid, Paraprofessional	240
General Managers, Top Executives	200
Police Patrol Officers	160
Counter Food Attendants	140
Truck Drivers	120
Sales Representatives	110
Registered Nurses	100
Automotive Mechanics	90

Source: EDD LMI

**Table 5.9-4
EMPLOYMENT DATA IN THE STUDY AREA
(Annual Average)**

County/City	Civilian Labor Force	Total Employment	Number Unemployed	Unemployment Rate	Median Household Income (\$)²
Imperial County¹	55,100	43,000	12,100	21.9	22,442
El Centro¹	16,750	13,200	3,550	21.2	25,147
Brawley¹	9,980	7,740	2,240	22.4	22,365
Calipatria²	967	789	178	18.4	20,254
Westmorland²	554	411	143	25.8	21,359
Niland²	408	317	86	21.1	16,207

1 Source: State of California Employment Development Department, Labor Market information Division, 2001.

2 Source: U.S. Census Bureau, 1990.

**Table 5.9-5
HOUSING IN COMMUNITIES POTENTIALLY
AFFECTED BY THE PROJECT (1998)**

County/City	Housing Units¹	Vacancy Rate (%)¹	Estimated Motel/ Hotel Rooms
Imperial County	43,891	5.9	NA
El Centro	12,263	6.1	620 ²
Brawley	7,038	6.4	300 ³
Census Tract 101	2,069	NA	NA
Calipatria	961	6.0	40 ²
Westmorland	667	7.1	NA
Niland	NA	NA	NA

1 Source: U. S. Census, 2000.

2 Source: American Automobile Association, Southern California & Las Vegas Tour Book, 2001.

3 Source: Brawley Chamber of Commerce, Personal Communication, 2001

**Table 5.9-6a
IMPERIAL COUNTY GENERAL FUND
REVENUES FOR 2000-2001**

Revenue	2000-2001
Taxes	\$19,078,844
Licenses and Permits	\$970,116
Fines, Forfeitures, and Penalties	\$3,150,390
Use of Money and Property	\$2,226,420
Aid from Governmental Agencies	\$87,289,895
Charges for Current Services	\$7,636,312
Other Revenues	\$5,592,335
Total Revenues	\$125,944,312

Source: Imperial County Auditor-Controller's Office, 2001

**Table 5.9-6b
IMPERIAL COUNTY GENERAL FUND
EXPENDITURES FOR 2000-2001**

Expenditures	2000-2001
General Government	\$12,716,557
Public Protection	\$38,447,743
Health and Sanitation	\$17,361,561
Public Assistance	\$51,081,954
Education	\$281,954
Total Expenditures	\$119,889,769

Source: Imperial County Auditor-Controller's Office, 2001

**Table 5.9-7
ETHNIC AND RACIAL COMPOSITION (1998) ¹
(Percent total population)²**

Area	Hispanic/Latino	White	Black	Asian/Others
Imperial County	72.2	49.4	4.0	4.0
El Centro	74.6	46.9	3.2	4.6
Brawley	73.8	52.8	2.4	2.4
Census Tract 101	54.6	40.7	16.8	2.4
Calipatria	57.3	32.4	21.3	1.3
Westmorland	82.2	55.7	1.0	1.0
Niland	55.3	54.8	3.1	6.5

1 Source: U.S. Census, 2000.

2 It should be noted that the Bureau of Census allows persons of Hispanic origin to identify with any of the minority population categories listed above, as well as with white, to capture undefined origins. Consequently, the sum of all categories is typically greater than 100 percent in areas with moderate to large Hispanic/Latino communities.

**Table 5.9-8
POVERTY STATUS AND INCOME OF STUDY AREA¹**

Area/City	Percent Below Poverty Level ²	Median Household Income (\$)¹
Imperial County	23.8	22,442
El Centro	23.3	25,147
Brawley	24.3	22,365
Census Tract 101	NA	NA
Calipatria	28.8	20,254
Westmorland	21.3	21,359
Niland	18.8	16,207

Source: U.S. Census 1990.

1 Note: 2000 Census Data not available

2 Poverty level is defined by the U.S. Census as a function of the size of a family unit and the number of children under 18 years of age. For the 2000 Census, the poverty threshold income for a family of four with two children was \$17,463 (U.S. Bureau of the Census, 2000).

**Table 5.9-9
FAMILY INCOME WITHIN SIX MILES OF THE PROPOSED PROJECT SITE**

Number of Families	Family Income in 1989 (\$)¹
10	5,000-10,000
16	10,000-17,500
33	22,500-27,500
19	30,000-37,500
7	75,000-100,000

Source: U.S. Census, 1990

Note: 2000 Census Data not available

**Table 5.9-10
PROJECT LABOR NEEDS AND
AVAILABLE LABOR BY CRAFT/SKILL¹**

Craft	Total Number of Workers in Imperial County 1997	Projected Total Number of Workers in Imperial County 2004	Maximum Number of Workers Needed for the Project	Average Number of Workers Needed for the Project	California OES Code
Maintenance Repairers/ General Utility	420	480	62	30	85132
Carpenters/Millwrights	230	290	89	58	87102
Concrete Finisher	60	80	35	22	87311
Plumbers, Pipefitters, Steamfitters	100	120	147	70	87502
Welders and Cutters	70	80	65	35	93914
Laborers	250	280	69	50	79041

1 Source: State of California EDD Labor Market Information

**Table 5.9-11
ESTIMATED OPERATIONS AND MAINTENANCE STAFF**

Staff Position	Number of Personnel
General/Administration	
Warehouseman	1
Safety Technician	1
Resource Technicians	2
Purchasing Agent	1
Lab Technicians	3
Project Analyst	1
Secretary	1
Management	4
Plant Manager	1
Operations Manager	1
Maintenance Manager	1
Plant Engineer	1
Maintenance	27
Maintenance Planner	1
Electrical/Instrumentation Supervisor	1
Mechanical Supervisor	1
Equipment Operator/Welding Supervisor	1
Machinist Supervisor	1
Electrical/Instrumentation technicians	6
Mechanical technicians	6
Equipment Operators and Welders	6
Machinists	4
Operations	28
Shift Supervisor	1
Control Operator	1
Plant Operator	2
Operators	3
TOTAL	69

**Table 5.9-12
SUMMARY OF LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

	LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
5.9 Socioeconomics					
Federal					
	Executive Order 12898	Requires federal agencies to identify and address disproportionately high and adverse effects of federal actions on the health or environment of minority and low income populations.	Section 5.9.5.1	BLM	1
State					
Local					
	Imperial County General Plan Land Use Element (Imperial County, 1993) Goal 8, Objectives 8.3 and 8.4	Ensures that school facilities and all private and public facilities are adequate based on the projected population.	Section 5.9.5.3	Imperial County Planning Department	3
	Cal. Gov. Code § 65997	Includes provisions for levies against development projects in school districts.	Section 5.9.5.3	Imperial County Planning Department	3

**Table 5.9-13
AGENCY CONTACT LIST FOR
LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

Federal					
1	U.S. Environmental Protection Agency, Region IX Mr. Gerald Rios 75 Hawthorne Street San Francisco, California 94105 (415) 744-1254				
State					
2	California Energy Commission Mr. Paul C. Richins Energy Facilities Licensing Manager 1516 9th Street, MS 15 Sacramento, CA 95814 (916) 654-4074 (916) 654-3882 prichins@energy.state.ca.us				
Local					
3	Imperial County Planning Department 939 Main Street El Centro, California 92243-2875 Jurg Heuberger, AICP Planning Director (760) 339-4236				